

Amendments to the Claims:

The following listing of claims replaces all current and prior versions of the claims:

1. (Currently Amended) A method of searching a database of data elements, the method comprising:
based on a starting data element, identifying a first set of one or more data elements in the database at least partially identified using a special purpose computer, the data elements of the first set being referenced by the starting data element, based on the first set, identifying a second set of one or more data elements in the database, the data elements of the second set referencing one or more of the data elements of the first set, and generating data based on the data elements of the first and second sets and the relationships therebetween at least partially generated using the special purpose computer;
the second set being identified by ~~any number of recursive searches at least two generations of search queries at least partially identified using the special purpose computer~~, in which any successive search query in comparison with the immediately preceding search query is capable of being contracted, expanded and/or otherwise modified to include one or more generations of interrelated data elements without any human intervention.
2. (Original) The method of claim 1, wherein identifying a first set of one or more data elements includes: determining whether the starting data element includes one or more references to one or more other data elements, and identifying a first set of one or more data elements based on the references.
3. (Original) The method of claim 1, wherein identifying a second set of one or more data elements includes: determining whether one or more data elements in the database include one or more references to one or more of the data elements of the first set, and identifying a second set of one or more data elements based on the references.

4. (Original) The method of claim 1, wherein the starting data element is associated with a starting time and wherein identifying a first set of one or more data elements includes identifying data elements referenced by the starting data element and associated with first times earlier than the starting time.

5. (Original) The method of claim 4, wherein identifying the second set of one or more data elements includes identifying data elements that reference the data elements of the first set and that are associated with second times later than the first times.

6. (Original) The method of claim 4, wherein identifying the second set of one or more data elements includes identifying data elements that reference the data elements of the first set and that are associated with second times later than the first times and earlier than the starting time.

7. (Original) The method of claim 1, further comprising: providing the generated data to one or more of a user and a display.

8. (Original) The method of claim 1, further comprising: graphically displaying the data elements of the first and second sets and the relationships therebetween.

9. (Original) The method of claim 8, wherein the data elements are represented by geometric shapes and wherein the relationships are represented by lines between geometric shapes.

10. (Original) The method of claim 9, further comprising: determining locations at which to display the geometric shapes and the lines to reduce overlaps between geometric shapes and crossings between lines.

11. (Currently Amended) A method of searching a database to identify prior art publications for a starting patent publication, the method comprising: based on the starting patent publication, identifying a first set of one or more publications in the database at least partially generated using a special purpose computer, the publications of the first set being cited by the starting patent publication, based on the first set, identifying a second set of one or more publications in the database, the publications of the second set citing one or more of the publications of the first set, and generating data based on the publications of the first and second sets and the citation relationships therebetween at least partially generated using the special purpose computer; and

the second set being identified by any number of recursive searches at least two generations of search queries at least partially identified using the special purpose computer, in which any successive search query in comparison with the immediately preceding search query is capable of being contracted, expanded and/or otherwise modified to include one or more generations of interrelated data elements without any human intervention.

12. (Original) The method of claim 11, wherein the publications include one or more of patent publications and non-patent publications.

13. (Original) The method of claim 12, wherein the patent publications include one or more of issued patents, published patent applications, and non-published patent applications.

14. (Original) The method of claim 11, further comprising: providing the generated data to one or more of a user and a display.

15. (Original) The method of claim 11, further comprising: graphically displaying the publications of the first and second sets and the relationships therebetween.

16. (Original) The method of claim 11, wherein the publications are represented by geometric shapes and wherein the relationships are represented by lines between geometric shapes.

17. (Original) The method of claim 11, further comprising: determining locations at which to display the geometric shapes and the lines to reduce overlaps between geometric shapes and crossings between lines.

18. (Original) The method of claim 11, further comprising: based on the second set, identifying one or more candidate patent publications for one or more of: invalidating prior art for the starting patent publication, licensing opportunities, and seminal prior art.

19. (Original) The method of claim 18, wherein identifying one or more candidate patent publications for invalidating prior art includes: identifying one or more patent publications in the second set that do not cite the starting patent publication, that are not cited by the starting patent publication, and that are associated with filing dates earlier than the starting patent publication.

20. (Original) The method of claim 18, wherein identifying one or more candidate patent publications for licensing opportunities includes: identifying one or more patent publications that are associated with a first assignee and that are cited by one or more patent publications associated with one or more different second assignees.

21. (Original) The method of claim 18, wherein identifying one or more candidate patent publications for seminal prior art includes: identifying one or more patent publications that cite a first number of patent publications and that are cited by a second number of patent publications, wherein the second number is greater than the first number.

22. (Original) The method of claim 11, further comprising: based on the second set, identifying one or more co-citing patent publications, the co-citing patent publications including patent publications of the second set that are associated with one or more of: filing dates later than the filing date of the starting patent publication and publication dates later than the filing date of the starting patent publication.

23. (Original) The method of claim 22, further comprising: based on the co-citing patent publications, determining a patent prosecution strategy including one or more of: filing one or more claims in a pending application, filing one or more continuing applications of a parent application, declaring one or more interferences, and disclosing one or more of the co-citing patent publications to a patent-granting office.

24. (Currently Amended) A processor program adapted to be executed on a special purpose computer, the special purpose computer if executing the processor program is adapted to search for searching a database to identify prior art publications for a starting patent publication, the processor program being stored on a processor readable medium and comprising instructions to cause a processor to: based on the starting patent publication, identify a first set of one or more publications in the database at least partially using a special purpose computer, the publications of the first set being cited by the starting patent publication, based on the first set, identify a second set of one or more publications in the database, the publications of the second set citing one or more of the publications of the first set, and generate data based on the publications of the first and second sets and the citation relationships therebetween at least partially using the special purpose computer; and

wherein said instructions to further cause a processor to: identify the second set by any number of recursive searches generations of search queries at least partially using the special purpose computer in which any successive search query in comparison with the immediately preceding search query is capable of being contracted, expanded and/or otherwise modified to include one or more generations of interrelated data elements without any human intervention.

25. (Original) The processor program of claim 24, further comprising instructions to: based on the second set, identify one or more candidate publications for invalidating prior art for the starting patent publication, the candidate publications including publications in the second set that do not cite the starting patent publication, that are not cited by the starting patent publication, that cite one or more publications cited by the starting patent publication, and that are associated with filing dates earlier than the starting patent publication.

26. (Original) The processor program of claim 24, further comprising instructions to: based on the second set, identify one or more candidate patent publications for licensing opportunities, the candidate patent publications for licensing opportunities including one or more patent publications that are associated with a first assignee and that are cited by one or more patent publications associated with one or more different second assignees.

27. (Original) The processor program of claim 24, further comprising instructions to: based on the second set, identify one or more candidate patent publications for seminal prior art, the candidate patent publications for seminal prior art including one or more patent publications that cite a first number of patent publications and that are cited by a second number of patent publications, wherein the second number is greater than the first number

28. (Original) The processor program of claim 24, further comprising instructions to: based on the second set, identify one or more co-citing patent publications, the co-citing patent publications including patent publications of the second set that are associated with one or more of: filing dates later than the filing date of the starting patent publication and publication dates later than the filing date of the starting patent publication.

29. (Currently Amended) The method of claim 1, wherein said generations of search queries recursive searching, without user intervention, comprises using one or more queries generated by an application.

30. (Currently Amended) The method of claim 29, wherein said generations of search queries recursive searching, without user intervention, further comprises using one or more queries generated primarily by an application.

31. (Currently Amended) The method of claim 29, wherein said generations of search queries recursive searching, without user intervention, further comprises using one or more queries generated by a computing platform application.

32. (Currently Amended) The method of claim 31, wherein said generations of search queries recursive searching, without user intervention, further comprises using one or more queries generated by a computer application.

33. (Currently Amended) The method of claim 11, wherein said generations of search queries recursive searching, without user intervention, comprises using one or more queries generated by an application.

34. (Currently Amended) The method of claim 33, wherein said generations of search queries recursive searching, without user intervention, further comprises using one or more queries generated primarily by an application.

35. (Currently Amended) The method of claim 33, wherein said generations of search queries recursive searching, without user intervention, further comprises using one or more queries generated by a computing platform application.

36. (Currently Amended) The method of claim 35, wherein said generations of search queries recursive searching, without user intervention, further comprises using one or more queries generated by a computer application.

37. (Currently Amended) The processor program of claim 24, and further comprising instructions to, execute said generations of search queries recursive searching, without user intervention, using one or more queries generated by an application.

38. (Currently Amended) The method of claim 37, and further comprising instructions to, execute said generations of search queries recursive searching, without user intervention, using one or more queries generated primarily by an application.

39. (Currently Amended) The method of claim 37, and further comprising instructions to, execute said generations of search queries recursive searching, without user intervention, using one or more queries generated by an computing platform application.

40. (Currently Amended) The method of claim 39, and further comprising instructions to, execute said generations of search queries recursive searching, without user intervention, using one or more queries generated by a computer application.